ALAN MATHEW VARGHESE

Alappuzha, Kerala

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OBJECTIVE

To leverage my skills in web development and AI technologies to create innovative solutions that address real-world challenges. I am committed to contributing to impactful projects and gaining hands-on experience in a collaborative environment. I aim to apply my knowledge in developing robust web applications and intelligent systems while working with experienced professionals to further enhance my technical skills and problem-solving abilities.

EDUCATION

TKM College of Engineering Kollam, Kerala, India

2022 - 2026

- B.Tech in Computer Science and Engineering. CGPA: 8.27
- Undergraduate Coursework: DSA, Operating System, Discrete Mathematics, Database.

Christ Central School Thiruvalla, Kerala, India

2020 - 2022

- CBSE 12th grade in Computer Science (94%).
- Coursework: Fundamentals of programming, Python.

Mathews Mar Athanasius Residential School Chengannur, Kerala, India

2008 - 2020

• ICSE 10th grade (97%).

PROJECTS

• Balloon Pop Mania

For our college fest, I created a hand-tracking balloon-popping game using **Pygame** and **OpenCV.** It showcased innovative applications of computer vision, allowing players to pop balloons with hand movements. The project was well-received and engaged participants, highlighting the fun and potential of combining different technologies. (GitHub link)

Car Detection Model

A Car Detection and Counting System using **OpenCV** to demonstrate the practical applications of computer vision in surveillance. The project aimed to automate traffic monitoring by detecting and counting cars crossing a line in a video feed. The outcome was a successful demonstration of how technology can be used for efficient traffic management, with its real-world relevance and technical execution. (GitHub link)

Flappy Bird AI

AI for the classic Flappy Bird game using **Pygame** and **NEAT** by exploring the capabilities of neural networks and genetic algorithms. The goal was to demonstrate how AI can learn and improve its performance by evolving over generations. The outcome was a successful demonstration of machine learning in action, showcasing the AI's ability to autonomously learn and adapt to the game. (GitHub link)

TECHNOLOGIES AND SKILLS

- Python, C++, C, Java, MySQL, HTML, CSS, JavaScript
- Figma, Photoshop, Blender, After Effects
- Leadership, Problem Solving, Creative Thinking, Independent Learner

CERTIFICATIONS

- Participated in Kerala's biggest web3 hackathon conducted by EmergX in association with Kerala Blockchain Academy.
- Career Essentials in **Software Development** by Microsoft and LinkedIn.
- Career Essentials in **Generative AI** by Microsoft and LinkedIn.
- **Self Driving Robot** workshop held at College of Engineering, Chengannur.
- Data Science workshop as part of PyWeek held at TKM College of Engineering.

LEADERSHIPS

- Student Placement Coordinator of CSE dept, TKM College of Engineering (2024)
- **Design Head** in Executive Committee of CSI, TKM College of Engineering (2023-2024)
- **Design Team** in Executive Committee of Coding Club, TKM College of Engineering (2023-2024)
- Design Team in Executive Committee of ACM, TKM College of Engineering (2023-2024)